

**UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK AND SEED PROGRAM**

APPROVED

USDA, AMS, LS, STDZ/RM 2607-S 04/01/2004

**TECHNICAL DATA SUPPLEMENT (TDS)
FOR FROZEN GROUND BISON – A634
AND BISON STEW MEAT – A633
TDS-BIS – MARCH 2004**

I. SCOPE

This technical data supplement (TDS) is for use by the United States Department of Agriculture (USDA), Agricultural Marketing Service (AMS), Livestock and Seed Program (LS) for the procurement of commercially frozen ground bison and bison stew meat. For this program, AMS will utilize the Institutional Meat Purchase Specifications (IMPS) descriptions and requirements for ground beef and beef for stewing for ground bison and bison stew meat, respectively.

II. APPLICABLE DOCUMENTS

The following documents will be incorporated as part of this USDA, TDS-BIS:

- IMPS General Requirements, effective June 1996.
- IMPS For Fresh Beef Products, Series 100, effective June 1996.
- IMPS Quality Assurance Provisions, effective June 1997.
- Meat Grading and Certification (MGC) Branch Instructions.
- ARC 1010 Procedure, USDA Supplier Eligibility Program.

III. ORDERING DATA: TO BE SPECIFIED BY THE PURCHASER (Section in the IMPS 100 Series) For the purpose of this TDS, references to “Ground Beef” (IMPS Item No. 136) and “Beef for Stewing” (IMPS Item No. 135A) are changed to Ground Bison and Bison Stew Meat, respectively.

A. ITEMS

1. GROUND BISON AND BISON STEW MEAT

The ground bison and bison stew shall be produced from bison harvested (slaughtered) in, and the finished product shall be prepared and handled in, an establishment(s) operating under the Voluntary Exotic Animal Inspection Program of the USDA, Food Safety and Inspection Service (FSIS).

- a) Ground Bison – Ground bison shall be produced from fresh or previously frozen bison cuts and trimmings.
- b) Bison Stew Meat – Bison stew meat shall be prepared from any portion of the carcass, which yields product that meets the end-item requirements for IMPS Item 135A.

2. MATERIAL

The contractor will assure that the product complies with the **Material** section of IMPS Item No. 136 for ground bison, and IMPS Item No. 135A for bison stew meat and the following additional criteria:

- a) Domestic Origin – All bison will originate from U.S. produced livestock.

- b) Harvest Requirements – Contractor must have documentation and a program in place that verifies the source of raw materials used in each lot of production. All bison will be harvested in facilities that comply with the following additional requirements:
- (1) Humane Handling – All bison shall be humanely handled in accordance with all applicable FSIS regulations, directives, and notices.
 - (2) Non-Ambulatory Disabled Bison – Meat from carcasses of non-ambulatory disabled bison will not be included in USDA purchased ground bison and bison stew meat.
 - (3) Pathogen Intervention – Include at least two pathogen intervention or anti-microbial steps. One of the intervention steps shall be steam pasteurization, an organic rinse, or a 180°F hot water wash and must be a critical control point (CCP) in their FSIS recognized slaughter process Hazard Analysis Critical Control Point (HACCP) plan.
 - (4) Carcasses Testing – Routinely test carcasses for *E.coli* O157:H7 to verify effectiveness of interventions, as provided in Section VI. B. 3 of FSIS Directive 10,010.1 dated 2-1-98.
 - (5) Spinal Cord Removal – All spinal cord tissue shall be removed during the harvesting process.

The domestic origin and harvest requirements will be verified in accordance with ARC 1010 Procedure, USDA Supplier Eligibility Programs (<http://www.ams.usda.gov/lsg/arc/dovp.htm>).

- c) Mechanical Separation – Bison meat that is mechanically separated from bone with automatic deboning systems or advanced meat (lean) recovery (AMR) systems or powered knives, will not be allowed.
- d) Fresh Chilled Bison – Prior to processing, commercial boneless bison shall be examined for compliance with IMPS Item No. 136 **Material** requirements. Product failing this examination will be rejected.
- e) Fresh Frozen Bison – Commercially available boneless bison must comply with the following additional requirements:
 - (1) Condition Examination – Bison meat which was not examined for condition before freezing may be offered for examination and processing not more than six months from the initial production date, provided it was vacuum-packaged and packed in commercial containers that were adequate to maintain product excellence during freezer storage. The date of production and freezer records to document that the bison was stored at 0° F or below shall be made available to the AMS agent at the time of examination.

- (2) Handling Examination – Previously frozen bison products shall be examined prior to grinding for evidence of defrosting or mishandling (see Section H.1.e). Cut surfaces, naturally exposed lean surfaces, and exposed fat shall be evaluated. There shall be no evidence of discoloration, foreign odors, purge, sticky surface slime, or other factors that are not typical of product that has been properly handled, frozen, and stored.

3. PROCESSING

- a) Ground Bison – Ground bison meat will be processed in accordance with IMPS and the following additional requirements:
 - (1) Ground Bison Processing – Ground bison will be processed in accordance with the **Processing** section of IMPS Item No. 136.
 - (2) Bone Collector / Extruder System – A bone collector/extruder system must be in operation on the final grind of product.
- b) Bison Stew Meat – Bison stew meat must comply with the following additional requirements:
 - (1) Bison Stew Meat Processing – Bison Stew Meat shall be processed to meet the end item requirements listed within IMPS Item No. 135A.
 - (2) Dicing – The meat shall be either hand-diced or mechanically diced (grinding is not permitted).
 - (3) Handling – To facilitate dicing, meat may be frozen and/or tempered one time only.
 - (4) Shank or Heel Meat – No shank or heel meat is permitted.

4. METAL DETECTION

All products shall be free of metal contaminants. Detection of stainless steel, ferrous, and non-ferrous (e.g., lead, copper, and aluminum) metals is required. The contractor's technical proposal must identify and describe the equipment, location, detection procedure, sensitivity levels, frequency of equipment validation, and corrective action procedures.

B. GRADE – No Grade Requirement

C. STATE OF REFRIGERATION

All finished bison products will be frozen, in accordance with FREEZING OPTION 1. Refer to **I. MEAT HANDLING, A. STATE OF REFRIGERATION, and B. PRODUCTION, TEMPERATURE AND TIME LIMITATIONS** section of the IMPS General Requirements.

D. FAT LIMITATIONS

1. **Ground Bison** – The average fat content shall not exceed 11 percent and the number of grams of fat per 100 gram serving will be declared in the nutritional facts panel on the package label. The fat content will be certified by AMS in accordance with IMPS QAPs. The 4 individual fat results shall be put into ascending order from the lowest to the highest value for evaluation (e.g., 8.30, 10.79, 11.63, and 13.20). The 4 individual fat test results shall be used to calculate average, median and range. Results not meeting the following requirements shall cause rejection of the lot:
 - a) Average – The average of the 4 individual results exceeds 11% (e.g., average of the 4 test results = **10.98**).
 - b) Median – The median, which is the average of the middle two test results, deviates from the average of the four individual samples by more than 2.0 percent (e.g., median is equal to the average of 10.79 and 11.63 = **11.21**).
 - c) Range – The difference between the highest and lowest test results exceeds 5 percent (e.g., 13.20 – 8.30 = **4.90**).
2. **Bison Stew Meat** – Surface and seam fat will not exceed ¼ inch in thickness at any point.

E. WEIGHT RANGE – Not Applicable

F. NETTING AND TYING – Not Applicable

G. PACKAGING AND PACKING

Refer to **II. PACKAGING AND PACKING** section of the IMPS General Requirements and the following additional requirements:

1. Packaging

- a) Package Net Weight – Ground bison and bison stew meat shall be packaged into 2-pound packages.
- b) Package Method – Ground Bison and bison stew meat will be packaged in one of the following methods:
 - (1) Mechanical Packaged – Mechanically packaged into tamper-proof commercial casings.
 - (2) Vacuum Packaged – Vacuum packaged in accordance with the IMPS General requirements.

2. Packing

- a) Shipping Container Net Weight – Twenty (20) 2-pound packages of ground bison or bison stew meat shall be packed into non-perforated shipping containers to a net weight of 40 pounds, without slackfilling or overfilling. Spacers or fillers may not be used to satisfy this requirement.
- b) Style and Size of Container – Only one style and size of shipping containers may be used in any one-delivery unit.

- c) Commingling – Commingling of ground bison and bison stew meat in the same shipping container will not be allowed.

3. Closure

Shipping containers will be closed by strapping, taping or gluing. When strapping is used, the initial closure (usually the bottom of container) shall be secured by the gluing or taping method.

4. Marking of Containers

Primary and shipping containers will be labeled to include all information required by FSIS regulations. In addition, each primary and shipping container must have the following markings:

- a) Primary Container – Each primary container (package) will have the following information included on commercially labeled packages:
 - (1) Name of Product.
 - (2) Safe Handling Instructions.
 - (3) "Best-if-used-by" Date – A date that is 180 calendar days from the date of production.
 - (4) Traceability Code – A code that is traceable to production lot and date.
 - (5) Nutrition Fact – Include fat declaration for number of grams of fat per 100 gram serving.
 - (6) FSIS Establishment Number.
- b) Shipping container – The following markings will be included on the shipping containers:
 - (1) Exhibit A – Shipping containers will be marked in accordance with Exhibit A. However, contractors may vary the placement of the required information shown in Exhibit A. Additional markings (e.g., company bar codes, logos, etc.), that are consistent with all other commercial labels, may be included.
 - (2) Traceability Code – A code that is traceable to production lot and date.

5. Palletized Unit Loads

Required, see IMPS General Requirements.

H. USDA CERTIFICATION

1. PRODUCT WILL BE CERTIFIED BY USDA, AMS, MGC

AMS agents will perform examinations in accordance with IMPS General Requirements, IMPS QAPS, MGC Branch Instructions and as specified below:

a) Product Examinations

- (1) **Ground Bison** – Product examination for excellent condition and detailed item description requirements will be in accordance with QAPS. In TABLE 100 I, delete defect numbers 218 and 219 in their entirety and replace with the following defects:

"218 Presence of any portion of the popliteal, prescapular, or prefemoral lymph glands or any other exposed lymph glands measuring 1.0 inch or more in one dimension and 0.5 inch in a second dimension.

219 Presence of non-carcass components or fat from the thoracic, lumbar, pelvic, cod, and /or udder areas of the carcass measuring 2.0 square inches or more and 0.5 inch or more in depth at any point."

Delete defect 294 in its entirety. Insert the following note at the bottom of the table:

"Note: The presence of any non-meat components not listed as defects above (e.g., spinal cord, organ tissue, foreign materials, etc.) shall cause rejection of the product by AMS."

- (2) **Bison Stew Meat** – Refer to **LOT ACCEPTANCE CRITERIA** section for diced items within QAPS. In TABLE 100 H, delete defect numbers 218 and 194 in their entirety. Replace defect number 218 with the following defect:

"218 Presence of any portion of the popliteal, prescapular, or prefemoral lymph glands or any other exposed lymph glands measuring 1.0 inch or more in one dimension and 0.5 inch in a second dimension."

Insert the following note at the bottom of the table:

"Note: The presence of any non-meat components not listed as defects above (e.g., spinal cord, organ tissue, foreign materials, etc.) shall cause rejection of the product by AMS."

b) Condition of Container – Condition of containers will be examined as follow:

- (1) Production Container Examination – At time of production, randomly scan shipping containers to assure defective containers are corrected and replaced.
- (2) Shipping Container Examination – Final examination of condition of shipping containers will be limited to scanning (without destructive

sampling) the delivery unit for defects which may have occurred during handling and storage (e.g., crushed, torn, dirty, stained, etc.). All defective containers must be replaced or corrected.

- c) Net Weight – Net weight will be in accordance with the QAPS only.
- d) Fat Content Analysis – Fat content analysis will be in accordance with the QAPS and FAT LIMITATIONS section of this specification.
- e) Traceability Code – Stamping (sealing) of shipping containers by the AMS agent is not required. The AMS agent will assure that each primary and shipping container has a traceability code that is traceable to a production lot and date.
- f) Temperature Examinations – Temperature will be examined as follow:
 - (1) Freezing Option 1 – Temperature will be examined using Freezing Option 1.
 - (2) Sample Examination – Bison previously frozen shall be examined before grinding or dicing for evidence of defrosting or mishandling during storage (see **3. PROCESSING**), and for boning and trimming defects. Only the samples (not the whole lot) shall be completely thawed to an internal temperature of not less than 34° F, or more than 40° F, for examination. The examination shall be in accordance with IMPS QAPS (stationary lot).

2. LOT SIZE AND PURCHASE UNIT SIZE ARE DEFINED AS FOLLOW:

- a) Lot Size – For finished product, the lot size will not exceed the amount specified by the purchaser as a purchase unit.
- b) Purchase Unit Size – The purchase unit size for ground bison and bison stew meat is 40,000 pounds net weight (1,000 shipping containers) plus the amount for use in making box fills at the time of laboratory sample withdrawal.

3. THE AMS AGENT WILL:

- a) Certify and Issue Certificate – Certify and issue an official certificate indicating the status of each lot as required by MGC Branch Instructions.
- b) Supervise Loading and Sealing – Supervise the loading and sealing of each truck.

4. OFFICIAL CERTIFICATES SHALL INCLUDE:

- a) Contract number.
- b) Notice-to-Deliver number.
- c) Name of product.
- d) Six digit commodity code.
- e) Production lot number(s) and the date each lot was produced.
- f) Count of shipping containers and total projected net weight in each production lot.
- g) Total projected net weights per delivery unit.
- h) Identity of conveyance (numbers and letters, seals, license, etc.) as

applicable.

- i) Destination(s).
- j) Sample average fat content analysis of each production lot for ground bison only (calculated to 2 decimal places, e.g., 8.25).

5. MICROBIOLOGICAL REQUIREMENTS

- a) Microbial Testing – Ground bison will be sampled and analyzed for the bacteria levels listed in the following AMS GROUND BISON MICROBIAL REQUIREMENTS Table. The appropriate analytical method for each of the bacteria levels specified shall be as described in the current edition of the Compendium of Methods for the Microbiological Examination of Foods, published by the American Public Health Association, and the "USDA/FSIS Microbiological Laboratory Guidebook, 3rd Edition/1998, Chapter 5" for *E.coli* O157:H7 requirements. Analysis results shall not exceed the levels listed in the following table.


AMS GROUND BISON MICROBIAL REQUIREMENTS	
Standard Plate Count	≤100,000/gram
Total Coliforms	≤500/gram
<i>E.coli</i>	≤100/gram
<i>E.coli</i> O157:H7	Negative/325 grams
Salmonella	Negative/25 grams


- b) Quality Assurance

- (1) Sampling protocol – The AMS agent will sample each lot. For the purpose of this section, a lot will be defined as production of finished product between "clean ups". The AMS agent will prepare and handle samples in accordance with MGC Branch Instruction 613 for Examination and Sampling Procedures for Microbiological Requirements. Vendors will be responsible for cost of microbial testing.
- (2) When the results of a sample exceed the levels specified in the above table, the involved lot will not be allowed delivery to USDA.

EXHIBIT A

SHIPPING CONTAINER MARKINGS: COMMERCIALY LABELED SHIPPING CONTAINERS SHALL INCLUDE THE INFORMATION SHOWN BELOW. MANUFACTURER'S NAME AND ADDRESS SHALL APPEAR. THE USDA SYMBOL AND DONATED STATEMENT SHALL BE BLACK, FLAT, WATERFAST, AND NONSMEARING. THE USDA SYMBOL SHALL BE AT LEAST 2.0 INCHES HIGH. ALL OTHER PRINTING OR STENCILING SHALL BE OF A SIZE AND CONTRASTING COLOR TO STAND OUT PROMINENTLY AND COMPLY WITH THE USDA-FSIS REGULATIONS OR STATE REGULATIONS.

	<p>PERISHABLE FROZEN - STORE AT 0°F (-17.8°C) OR BELOW</p> <p>Boxes must include Safe Handling instructions in accordance with FSIS Mandatory Safe Handling Statements on Labeling of Raw Meat and Poultry.</p>  <p>Manufacturer's Name and Address (here or on principle display panel)</p>	
	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>Product Name Product Code _____</p> <p>CONTRACT NO. KEEP FROZEN</p> </div> <div style="width: 45%;"> <p>DATE PACKED LOT# _____ BOX _____</p> <p>NET WT lbs (kg.)/</p> </div> </div>	



NOTES: DATE PACKED SHALL BE THE MONTH, DAY, AND YEAR OF PACKING.
 USE PRODUCT CODE A634 FOR GROUND BISON AND A633 FOR BISON STEW MEAT
 SERIAL CONTRACT NUMBER WILL BE FURNISHED BY USDA.
 LOT NO. AND BOX NO. MAY BE PLACED ON THE SAME LINE OR AS SHOWN ABOVE.
 BOX NUMBERS SHALL BE SEQUENTIAL.

PER 9 CFR 317.4 & 317.5, PRIOR APPROVED LABELS NEED NOT BE RESUBMITTED. CONTRACTORS THAT DO NOT HAVE APPROVED LABELS ON FILE MUST SUBMIT LABELS IN SKETCH FORM ONLY TO THE APPROPRIATE USDA, FSIS OR STATE AGENCY.